

Appl. No. 10/075,310
Amendment and/or Response
Reply to Office action of 4 May 2006

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Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A network comprising a plurality of subnetworks which can each be connected via bridge terminals and each include a controller for controlling a subnetwork, which controller is provided for shifting the frame structure of its subnetwork to at least a frame structure of another subnetwork.
2. (Original) A network as claimed in claim 1, characterized in that a controller is provided for lengthening frames or for inserting an unused phase between successive frames up to a prescribed frame difference relative to the frame structure of the other subnetwork.
3. (Original) A network as claimed in claim 1, characterized in that a controller is provided for shortening frames up to a prescribed frame difference relative to the frame structure of the other subnetwork.
4. (Original) A network as claimed in claim 1, characterized in that a controller of a first subnetwork is provided for shortening frames, and at least a controller of another subnetwork is provided for lengthening frames or for inserting an unused phase between successive frames up to a prescribed frame difference of the frame structures of the two subnetworks.
5. (Original) A network as claimed in claim 1, characterized in that a controller of a subnetwork is provided for communicating with at least another controller of another subnetwork regarding the type of shift.

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6. (Original) A network as claimed in claim 1, characterized in that a bridge terminal is provided for instructing the controllers of the subnetworks connecting them as to which controller is to carry out a shift and in which direction.

7. (Previously presented) A controller in a first subnetwork which can be connected to other subnetworks of a network via bridge terminals, the controller being provided for controlling the first subnetwork and for displacing the frame structure of the first subnetwork relative to at least one frame structure of another subnetwork.

8. (Previously presented) A network as claimed in claim 7, wherein
the first subnetwork is a centralized subnetwork comprising a plurality of first terminals, each first terminal having an associated first controller, wherein the controller for controlling the first subnetwork forms associated first medium access control (MAC) frames according to a first MAC frame structure for transmission in the first subnetwork, and wherein one of the first terminals is a first bridge terminal for communication of the first MAC frames to said another subnetwork; and

said another subnetwork is a second centralized subnetwork comprising a plurality of second terminals, each second terminal having an associated second controller, wherein one of the second controllers is a central second controller responsible for forming associated second MAC frames according to a second MAC frame structure for transmission in the second subnetwork, and wherein one of the second terminals is a second bridge terminal for communication of the second MAC frames to said first subnetwork,

wherein the controller for controlling the first subnetwork displaces the first MAC frame structure to the second MAC frame structure.

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9. (Previously presented) The network as claimed in claim 8, wherein the first controller displaces the first MAC frame structure to the second MAC frame structure by shifting the first MAC frame structure to minimize a waiting time between the first MAC frame structure and the second MAC frame structure.

10. (Previously presented) A network, comprising:

a first centralized subnetwork comprising a plurality of first terminals, each first terminal having an associated first controller, wherein one of the first controllers is a first central controller responsible for forming associated first medium access control (MAC) frames according to a first MAC frame structure for transmission in the first subnetwork, and wherein one of the first terminals is a first bridge terminal for communication of the first MAC frames to another subnetwork; and

a second centralized subnetwork comprising a plurality of second terminals, each second terminal having an associated second controller, wherein one of the second controllers is a second central controller responsible for forming associated second MAC frames according to a second MAC frame structure for transmission in the second subnetwork, and wherein one of the second terminals is a second bridge terminal for communication of the second MAC frames to another subnetwork,

wherein the central first controller shifts the first MAC frame structure to the second MAC frame structure.

11. (Previously presented) A network as claimed in claim 10, wherein the central first controller shifts the first MAC frame structure by inserting an unused phase between two respective MAC frames of the first MAC frame structure, the unused phase corresponding to a switchover time of the first bridge terminal.

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12. (Previously presented) A network as claimed in claim 10, wherein the central first controller shifts the first MAC frame structure by lengthening the first MAC frames, said lengthening corresponding to a switchover time of the first bridge terminal.

13. (Previously presented) A network as claimed in claim 10, wherein each of the first MAC frames has a duration T_n and the central first controller shifts the first MAC frame structure by lengthening the duration of the first MAC frames to T_e , with $T_e > T_n$, in order to synchronize the first and second subnetworks.

14. (Previously presented) A network as claimed in claim 13, wherein the central first controller returns the duration of the first MAC frames to T_n after the synchronization.

15. (Previously presented) The network as claimed in claim 10, wherein the first bridge terminal is the second bridge terminal.

16. (Previously presented) The network as claimed in claim 10, wherein the central first controller is a first bridge controller of the first bridge terminal.

17. (Previously presented) The network as claimed in claim 10, further comprising:
a third centralized subnetwork comprising a plurality of third terminals, each third terminal having an associated third controller, wherein one of the third controllers is a central third controller responsible for forming associated third MAC frames according to a third MAC frame structure for transmission in the third subnetwork, and wherein one of the third terminals is a third bridge terminal for communication of the third MAC frames to another subnetwork,

wherein the central third controller shifts the third MAC frame structure to the first MAC frame structure.

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18. (Currently Amended) The network as claimed in claim ~~40~~ 17, wherein the first bridge terminal is the third bridge terminal.

19. (Currently Amended) The network as claimed in claim ~~40~~ 17, wherein the first bridge terminal is the second bridge terminal.

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